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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,708

03/18/2004

Raymond A. Heimann

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EXAMINER

WILLIAMS, MARK A

ART UNIT

PAPER NUMBER

3676

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/803,708

Applicant(s)

HEIMANN ET AL.

Examiner

Mark A. Williams

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-27 and 33-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-27 and 33-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not understood fully what is meant by “a curved portion that is substantially a radius...” in the context of the claimed invention.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 35, 36, 38-46, and 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beigh, US Patent 4,242,773.

Beigh provides for use in combination with a cabinet having opposite side

walls and a front opening and a door movable between open and closed positions relative to the front opening (as conventional in the art), a hinge for pivotally connecting the door 55 to the cabinet 51, comprising a door leaf 3 mounted within the door; a cabinet leaf 9 mounted on what is broadly considered an exterior surface of the cabinet; an intermediate leaf 41 interconnecting the door and cabinet leaves so as to allow the door to pivot. A first pin 37 connecting the door leaf and intermediate leaf together and a second pin 39 connecting the cabinet leaf and intermediate leaf together. The intermediate leaf pivots about the second pin and then the door leaf pivots about the first pin when opening the door. The cabinet leaf is fixed relative to the second pin and the intermediate leaf pivots about the second pin. The first pin being substantially hidden within the door when the door is in both the open and closed positions. At least one of the cabinet leaf and intermediate leaf includes a cam ramp (see figures 3, 5, 7 and 9) to delay full pivotal movement about the second pin until pivotal movement about the first pin is complete. The door leaf and the intermediate leaf pivots sequentially about the first and second pins. The sequential pivot operation of the first and second pins is reversed between the opening and closing operations. The intermediate leaf includes a first end within the door and a second end outside the door. The intermediate leaf has curved portions (see the bent corners) extending between the

first and second ends and one extending through an opening in the door. The door includes a front face and a perpendicular edge with a slot therein, the intermediate leaf having a first end substantially hidden within the door in both the open and closed positions, a second end outside the door, and an intermediate portion extending through the door slot. Regarding claim 46, the particular arrangement of a cabinet with hinges is very obvious, since the device of Beigh is intended for such use, as conventional in the art. As best understood, the intermediate leaf has a curved portion that is substantially a radius centered at the first pivot pin.

Beigh provides the claimed invention except the hinge pivots 270° between a closed position over the front opening of the cabinet and an open position along one of the side walls of the cabinet. However, it is known in the art of hinges, doors, and cabinets to allow a hinge to pivot in such a way. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device this way, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Such an arrangement would have allowed for the door to swing to a complete open position adjacent a side wall of the cabinet, providing greater clearance of the door from the opening of the cabinet.

Applicant should also note both Naderi et al., US Patent 6,034,355, and Wegman, US Patent Application Publication 2004/0034966 A1, for teaching of hinges that allow doors of cabinets and/or like structures to swing 270 degrees.

3. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beigh in view of Gidsey, US Patent 5,048,233. Beigh teaches the claimed invention except for explicitly showing a pair of like hinges joined by a rod member. Gidseg teaches this general concept, as well known in the art as a means for forming a hinged cabinet or like device. It would have been obvious at the time the invention was made for one skilled in the art to have included in the design of Beigh such a modification, for the purpose of forming a hinged structure, such as a cabinet or like structure.

4. Claims 25-27, 33, 34 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beigh in view of Bobrowski, US Patent 5,075,928. See the above rejection. Beigh provides the claimed invention except explicitly teaching the door leaf mount being fully enclosed within the door so as to be hidden from view when the door is open, as claimed. Bobrowski teaches the general concept of a concealed leaf 36 completely hidden from view. Although the concealed leaf is primarily disclosed as being used within the door frame, Bobrowski also suggest

that such structure could be usable within the door (column 5, lines 43-44), which would be an obvious art recognized modification. Such structure allows for a desirable aesthetical appeal. It would have been obvious at the time the invention was made for one skilled in the art to have included in the design of Beigh such a modification, for the purpose of allowing for a desirable aesthetical appeal.

Response to Arguments

5. Applicant's arguments with respect to the claims of record have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the optimal range case law is not applicable to the claimed cabinet hinge arrangement. However, although the case law may have originated from a chemical application, it is not excluded from having application in a broad range of arts, including mechanical applications, since the general issue is the same—whether extending the range of a component of a device would be obvious. In the present application, the component of the device of interest is the range of operation of the hinge to allow the door to swing open up to 270 degrees. It is the position of the examiner that such a modification is obvious and within the scope of the applied art, as outlined in the above rejection. Further, applicant should also note both Naderi et al., US Patent 6,034,355, and Wegman, US Patent

Application Publication 2004/0034966 A1, for teaching of hinges that allow doors of cabinets and/or like structures to swing 270 degrees, as further evidence that such arrangements are known in the art.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Williams whose telephone number is (571) 272-7064. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark Williams
1/31/07 *mw*



BRIAN E. GLESSNER
SUPERVISORY PATENT EXAMINER